Diffractive Color Filter

Abstract of Disclosure

A color display system includes a color light separator that separates incident white illumination light into red, green and blue wavelength bands to be directed to distinct color component sub-pixels (sometimes called dots) that are arranged in a dot-matrix, color triad arrangement (e.g., stripe or delta) to form individual picture elements (pixels) on a pixelated electronic image device (e.g., LCD of DMD). The entire picture is optically shifted from one set of color component sub-pixels to another in a 3-field sequence. As a result, the sets of red, green and blue color component sub-pixels appear to an observer as a single full-color image, thereby providing a dot sequential color display.